TNI Chemistry FoPT Subcommittee Meeting Summary March 24, 2015

1. Roll call and Meeting Minutes:

Chair Carl Kircher called the meeting of the Chemistry FoPT Subcommittee to order on March 24, 2015 at 12:07 ET. Attendance is recorded in Attachment A. There were 6 members on the call.

Carl continues to maintain the updated concentrations and limits on the SCM Excel Summary table for use at each meeting.

2. SCM FoPTs

<u>Naphthalene</u>

This is the last Low-Level PAH being considered in this grouping. The study concentration was 31.4 - 680 ug/Kg. The PDF is dated 2-3-15. The current concentration limits are 150 – 1000 ug/Kg. It did pass criteria for fixed limits at 92.4%. It passed the Stdev R^2 Eval > 0.75.

It did pass fixed limit criteria, but the group will not consider it because it would be inconsistent with how other similar analytes have been handled. Carl recommends looking at the new regression equation.

A motion was made by Andy to leave the concentration limit as 150-1000 ug/Kg for Naphthalene on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 2-9-15. The motion was seconded by Dan and passed unanimously.

This completes the low level PAHs.

The committee started looking at the higher concentration ranges in the Base-Neutrals grouping:

Acenaphthene

The study concentration was 404 - 5673 ug/Kg. The PDF is dated 2-24-15. The current concentration limits are 1000-12000 mg/Kg. It did pass criteria for fixed limits at 59%. It passed the Stdev R^2 Eval > 0.75.

Andy noted that his lab statistical limits are 65-99% with an average recovery of 82%. Dan asked about the prep method. They use a sonication extraction. The LCS sample is in sodium

sulfate – not soil. Stacey's lab limits are 54-108% and the current average recovery is 74%. They use a similar extraction method and LCS matrix.

There were a number of BNAs that passed fixed limit criteria, but Carl hesitates using fixed limits because we are only looking at c and d. The committee usually sets fixed limits around the assigned value. Now we are looking at the d coefficient that is relative to the study mean vs. the assigned value. He is not sure that the fixed limits is d less than 5% of lowest mean versus 5% of lowest assigned value. He can calculate it himself manually in the future. He did a quick calculation and it did still pass the fixed limit criteria. Dan noted that PTRL would need to be looked at too. The lowest PTRL would be 10% of 1000 - thus 100. This is where it is now.

Based on assigned value all the other analytes are in compliance with the NELAC Standard.

A motion was made by Dan to leave the concentration limits as 1000-12000 ug/Kg for Acenaphthene on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 2-24-15. The motion was seconded by Stacey and passed unanimously.

Joe joined in 12:40pm.

<u>Acenaphthylene</u>

The study concentration was 148 - 5984 ug/Kg. The PDF is dated 2-24-15. The current concentration limits are 1000 - 12000 mg/Kg. It did pass criteria for fixed limits at 63.3%. It passed the Stdev R^2 Eval > 0.75.

There were a few outliers as per the SOP. Carl recommends sticking with the regression equation instead of fixed limits. There is improvement using the new regression equation. The recovery is not as good for this analyte. Carl recommends keeping the current concentration range and using the new equation.

Andy noted that his lab statistical limits are 65-99% with an average recovery of 82%. They are using sodium sulfate as the matrix. Stacey's lab does not have data on this analyte. Andy has a reporting limit of 333 ug/Kg.

A motion was made by Dan to leave the concentration limits as 1000-12000 ug/Kg for Acenaphthylene on the SCM FoPT accreditation table and using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 2-24-15. The motion was seconded by Andy and passed unanimously.

Anthracene

Dan and Carl got different results, so both PDFs were sent. The study concentration was 395-8404 ug/Kg. The PDFs are dated 2-24-15 ("dan" is noted at the end of his PDF file name).

The current concentration limits are 1000 - 1200 ug/Kg. It did not pass criteria for fixed limits and did pass the Stdev R² Eval > 0.75.

Dan's equation appears to give better data and Carl recommends it. Dan has a lower d coefficient and c looks about the same. It is more comparable to the current table. Dan did the SOP outlier procedures and then removed the raw data outliers (n < 10 lab participants). Carl did the opposite. This would be a deviation to the SOP.

Dan thought he removed more outliers than Carl.

Andy noted that his lab statistical limits are 61-109% with an average recovery of 85% for Anthracene. Stacey does not have a lot of data, but she is seeing 27-133%.

A motion was made by Dan to leave the concentration limit as 1000-12000 ug/Kg for Anthracene on the SCM FoPT accreditation table using the study mean and the new cd coefficients as presented on the PDF files presented by Dan dated 2-24-15. The motion was seconded by Joe and passed unanimously. Carl noted that there is an SOP departure that needs to be communicated to the PTPEC.

Benzo(a)anthracene

The study concentration was 423 - 6049 ug/Kg for. The PDF is dated 2-24-15. The current concentration limit is 1000 - 12000 ug/Kg. It did pass criteria for fixed limits at 50.1%. It passed the Stdev R^2 Eval > 0.75.

Dan and Carl's results were similar, so only one PDF was submitte for consideration.

Andy noted that his lab statistical limits are 64-121% with an average recovery of 92.4%.

A motion was made by Dan to leave the concentration limit as 1000-12000 ug/Kg for Benzo(a)anthracene on the SCM FoPT accreditation table using the study mean and the new cd coefficients as presented on the PDF files presented by Dan dated 2-24-15. The motion was seconded by Stacey and passed unanimously.

Benzo(b)fluoranthene

The study concentration was 436 - 7170 ug/Kg for. The PDF is dated 2-24-15. The current concentration limit is 1000 - 12000 ug/Kg. It did pass criteria for fixed limits at 57.9%. It passed the Stdev R^2 Eval > 0.75.

Both Dan (_dan) and Carl's PDFs were sent for this analyte. Carl noted that the new ones are slightly improved. Dan removed a few more outliers. They were flagged as outliers. Dan prefers his analysis. Carl will take a look to see if there were any deviations from the SOP and note this on the Excel Summary if it is an issue.

Andy noted that his lab statistical limits are 55-122% with an average recovery of 88%. The Excel Summary file with lab results that Carl received from Jeff showed a recovery of 51-123%.

A motion was made by Dan to leave the concentration limit as 1000-12000 ug/Kg for Benzo(a)fluoranthene on the SCM FoPT accreditation table using the study mean and the new cd coefficients as presented on the PDF files presented by Dan dated 2-24-15. The motion was seconded by Andy and passed unanimously. (Addition: Carl noted that there is an SOP departure that needs to be communicated to the PTPEC.)

Benzo(k)fluoranthene

The study concentration was 736 - 6490 ug/Kg for. The PDF is dated 2-24-15. The current concentration limit is 1000 - 12000 ug/Kg. It did pass criteria for fixed limits at 59%. It passed the Stdev R^2 Eval > 0.75.

Andy noted that his lab statistical limits are 55-113% with an average recovery of 84%. The Excel Summary file with lab results that Carl received from Jeff showed a recovery of 42-129%. Stacey does not have any data for this analyte.

A motion was made by Andy to leave the concentration limit as 1000-12000 ug/Kg for Benzo(k)fluoranthene on the SCM FoPT accreditation table using the study mean and the new cd coefficients as presented on the PDF files presented by Carl dated 2-24-15. The motion was seconded by Joe and passed unanimously.

3. Action Items

See action item table in attachments.

4. New Business

- There may be some petitions for new analytes received in the next month.

5. Next Meeting

The next meeting of the Chemistry FoPT Subcommittee has been scheduled for April 7, 2015

Action Items are included in Attachment B and Attachment C includes a listing of reminders.

The call was ended by FreeConference at 1:31 pm EST. (Motion: Stephen Second: Stacey Unanimously approved.)

Attachment A

Participants TNI Chemistry FoPT Subcommittee

Members	Affiliation	Contact Information	
Carl Kircher,	Florida DOH		
Chair		carl_kircher@doh.state.fl.us	
Present			
Joe Morotti	Sigma-Aldrich RTC	Joe.morotti@sial.com	
Present 12:40pm			
Melanie Ollila	Pace Analytical Services, Inc.	MOllila@pacelabs.com	
Absent			
Jeff Lowry	Phenova	JeffL@phenova.com	
Absent			
Stephen Arpie	Absolute Standards, Inc.	stephenarpie@mac.com	
Present			
Dan Dickinson	New York, DOH	daniel.dickinson@health.ny.gov	
Dan Dickinson	New Tork, DON	danier.dickinson@neaitii.ny.gov	
Present			
Stacey Fry	E.S. BABCOCK & Sons,		
, ,	Inc.	sfry@babcocklabs.com	
Present		, 0	
Joe Pardue	Pro2Serve, Inc.	423-337-3121	
		joe_pardue@charter.net	
Absent			
Dr. Andy Valkenburg	Energy Laboratories, Inc.	avalkenburg@energylab.com	
		406-869-6254	
Present			
Ilona Taunton,	TNI	Ilona.taunton@nelac-institute.org	
Program Administrator		828-712-9242	
Present			

Attachment B

Action Items – Chemistry FoPT Subcommittee

	Action Item	Who	Expected Completion	Actual Completion
119	Use new PCB in Oil regression equation on historical data to confirm there is no substantial increase in failure rates.	Joe, Dan, Stephen, Jeff	2-26-15	
120				

Attachment C

Backburner / Reminders – Chemistry FoPT Subcommittee

	Item	Meeting	Comments			
		Reference				
4	Consider nomenclature differences between the analyte codes and the FoPT tables.	2-23-10				
10						